### TRAITÉ DE COOPÉRATION EN MATIÈRE DE BREVETS

## **PCT**

## RAPPORT PRÉLIMINAIRE INTERNATIONAL SUR LA BREVETABILITÉ (chapitre I du Traité de coopération en matière de brevets)

(règle 44bis du PCT)

Référence du dossier du déposant ou du mandataire BELLER CAS 8	POUR SUITE À DONNER	Voir le point 4 ci-dessous
Demande internationale no. PCT/FR2004/003365	Date du dépôt international (jour/mois/année) 23 December 2004 (23.12.2004)	Date de priorité (jour/mois/année) 24 December 2003 (24.12.2003)
Classification internationale des breve Voir les informations pertinentes dans	ts (8 <sup>e</sup> edition, sauf indication d'une #dition ant#rier le formulaire PCT/ISA/237	ure)
Déposant BELLER, Isi		

	·						
1.	Le présent rapport préliminaire international sur la brevetabilité (chapitre I) est établi par le Bureau international au nom de l'administration chargée de la recherche internationale selon la règle 44bis.1.a).						
2.	Ce RAPPORT comprend un total de 8 feuilles, y compris la présente feuille de couverture.						
	Dans les feuilles jointes, toute référence à l'opinion écrite de l'administration chargée de la recherche internationale doit être entendue, à la place, comme une référence au rapport préliminaire international sur la brevetabilité (chapitre I).						
3.	Le présent rapport contient des i	ndications relatives aux points suivants:					
	Cadre n° I	Base de l'opinion					
	Cadre n° II	Priorité					
	Cadre nº III	Absence de formulation d'opinion quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle					
	Cadre n° IV	Absence d'unité de l'invention					
	Cadre n° V	Déclaration motivée selon l'article 35.2) quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration					
	Cadre n° VI	Certains documents cités					
	Cadre n° VII	Certaines irrégularités relevées dans la demande internationale					
	Cadre n° VIII	Certaines observations relatives à la demande internationale					
4.	Le Bureau international commun mais pas avant l'expiration du de requête expresse à cet égard en v	niquera le présent rapport aux offices désignés conformément aux règles 44bis.3.c) et 93bis.1 élai de 30 mois à compter de la date de priorité (règle 44bis.2), sauf si le déposant a présenté une vertu de l'article 23.2).					

	Date d'établissement du présent rapport 29 August 2006 (29.08.2006)			
Bureau international de l'OMPI 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Fonctionnaire autorisé  Athina Nickitas-Etienne			
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#### PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY				ITY	PCT PCT				
То:			i.			PCT	TTON		
		·		·		TTTEN OPINION OF THE ONAL SEARCHING AUTHO			
						(PCT Rule 43bis.1)			
		·			Date of mailing (day/month/year)	See Form PCT/ISA (sheet 2)	A/210		
Applica	nt's or a	gent's file reference	ce		FOR FURTHER A				
i		CAS 8				See paragraph 2 below			
		plication No.		International filing date (	(day/month/year)	Priority date (day/month/year)			
		2004/003	365 ·	23.12.2004	uas, morare years	24.12.2003			
ı		tent Classification		n national classification an	d IPC	· .			
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1.		pinion contains ir	ndications rela	ting to the following items	S <b>:</b>				
	$\boxtimes$	Box No. I	Basis of the	opinion					
	Ш	Box No. II	Priority						
		Box No. III	Non-establi	shment of opinion with re	regard to novelty, inventive step and industrial applicability				
		Box No. IV	Lack of unit	ty of invention					
		Box No. V			bis.1(a)(i) with regard to novelty, inventive step or industrial tions supporting such statement				
		Box No. VI	Certain doc	uments cited					
	$\boxtimes$	Box No. VII	Certain defe	ects in the international app	plication		ŕ		
	$\boxtimes$	Box No. VIII	Certain obs	ervations on the internatio	nal application				
2.	FURT	THER ACTION			•				
	Intern than th	ational Prelimina his one to be the	ry Examining IPEA and the	Authority ("IPEA") excep	t that this does not app the International Bur	I be considered to be a written only where the applicant chooses an A eau under Rule 66.1 bis(b) that written	uthority other		
	writte	n reply together,	where approp	, considered to be a writte priate, with amendments, n of 22 months from the pr	before the expiration	s, the applicant is invited to submit of 3 months from the date of materials atter.	to the IPEA a iling of Form		
	For fu	rther options, see	Form PCT/IS	A/220.					
. 3.	For fu	rther details, see i	notes to Form	PCT/ISA/220.			•		
				*					
Name a	nd maili	ng address of the	ISA/EP		Authorized officer				
I					Telephone No		*		

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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/FR2004/003365

Box	k No. I	Basis of this	opinion .	_		-			
1.		regard to the langua unless otherwise ind			ished on the basis of	f the internation	al application i	n the language in v	which it was
		This opinion has bee	n established on	the basis of a tr	ranslation from the o	original languag	e into the follow	wing language	
	_			, which is the l	anguage of a transla	tion furnished f	or the purposes	of international se	arch (under
		Rule 12.3 and 23.1(t	·)).						
2.		regard to any nucle tion, this opinion has				the internation	al application	and necessary to	the claimed
	a.	type of material						·	
	ſ	a sequence list	ing						
·		table(s) related	to the sequence	listing					
	b.	format of material					•		
	[	in written form	nat			4			
	[	in computer re	adable form						
	c.	time of filing/furnish	ing						
	ſ	contained in th	e international a	pplication as fi	led.		•		•
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		Turnished subs	equently to this.	Authority for th	e purposes of search	1.	•	-	
3.	ш.	In addition, in the of furnished, the require filed or does not go	ed statements th	at the informat	ion in the subsequer	nt or additional	Vor table(s) rel copies is identi	ating thereto has be cal to that in the ap	een filed or pplication as
4.	Addit	ional comments:		•				•	
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International application No.
PCT/FR2004/003365

Box	Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
1.	Statement					
	Novelty (N)	Claims	1-9	YES		
		Claims		NO NO		
	Inventive step (IS)	Claims		YES		
		Claims	1-9	NO		
	Industrial applicability (IA)	Claims	1-9	YES		
		Claims		NO		

#### 2. Citations and explanations:

- 1 Reference is made to the following documents:
  - D1: US 5 573 403 A (BELLER ISI *ET AL*) 12 November 1996 (1996-11-12)
  - D2: US 6 629 844 B1 (JENKINS WILLIAM M ET AL)
    7 October 2003 (2003-10-07)
- The present application fails to comply with the requirements of PCT Article 33(1) since the subject matter of claim 1 does not involve an inventive step as defined in PCT Article 33(3).
- 2.1 Document D1, which is regarded as the prior art closest to the subject matter of claim 1, describes (see the document in its entirety) an audiofrequency analogue converter apparatus for the auditory treatment of audio-phonatory disorders exhibited by certain subjects, as a general rule by young children.

The subject matter of claim 1 differs from the teachings of D1 in that the treatment of the signal is performed digitally also making use of the envelope of the input signal to determine the

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Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

modifications to be made to the signal.

The problem that the present invention is intended to solve can thus be considered to be how to adapt the known analogue system of D1 to a digital signal treatment.

The solution to this problem, as proposed in claim 1 of the present application, is not considered to involve an inventive step (PCT Article 33(3)), for the following reasons:

- the switch from an analogue appliance to a digital treatment is standard in the field of audio and video signal treatment,
- the algorithm for treating the input signal based on the envelope of the signal is also known, cf. D2 (abstract, figures 6, 32, 33, paragraphs 243-283), used in the same aim of treating subjects suffering from audio-phonatory disorders.

Therefore the features described in documents D1 and D2 would be combined by the person skilled in the art, without evidencing proof of inventiveness, to solve the problem posed. The solution proposed in independent claim 1 may not therefore be considered to involve an inventive step (PCT Article 33(3)).

3 Claims 2-9 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and inventive step (PCT Article

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Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
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	documents	s D1-2.	. •				
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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

1. Contrary to the requirements of PCT Rule 5.1(a)(ii), the relevant prior art disclosed in document D2 is not mentioned in the description, nor is this document identified therein.

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

- 1. Claim 1 is not clear and fails to comply with the requirements of PCT Article 6 insofar as the subject matter for which protection is sought has not been clearly defined. Such as it has been specified, the functional definitions below will not allow the person skilled in the art to determine which are the technical features necessary for the effecting of the functions:
  - establish a third sequence of digital values, bounded, on the basis of the second digital sequence;
  - establish a sequence of values of emission frequencies modulated according to the values of the third sequence of digital values.